

Abstract of the Disclosure

Providing a systematic and comprehensive mechanism for applying echo cancellation within a telecommunication switching system by a local switching system such as a PBX. Echo cancellation circuits are deployed throughout the telecommunication switching system using different types of echo cancellation circuits with each type having different capabilities with respect to a time offset of an echo return signal relative to when a voice signal was generated by a talker. The echo cancellation circuits deployed within the local telecommunication switch are an integral part of trunk circuits and provide the largest time offset. Further, the echo cancellation circuits deployed within the local telecommunication switch are capable of controlling echoes in either direction with respect to the integral trunk circuit and may be used as service circuits if not needed by the integral trunk circuit. A systematic and comprehensive mechanism further comprises terminating echoes at the edges of networks having long transmission delays such as a wide area network (WAN) comprising a combination of ATM and/or IP switching networks. The mechanism enables uniformity in policing echoes at the "near end" at the appropriate points in the PBX network or in a network of PBX's.